



IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

\$ 2831

PATENT APPLICATION

Girsh Blumberg  
Peter B. Littlewood

CASE 1-2

Serial No. 10/043372 Group Art Unit 2831

Filed January 9, 2002

Examiner N. Ha

Title Electronic Devices Based On Density Wave Dielectrics

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APR 16 2003  
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ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

Enclosed is an amendment in the above-identified application.

Please charge the amount of \$36 to **Lucent Technologies Deposit Account No. 12-2325** to cover the fee as calculated below. Duplicate copies of this letter are enclosed.

CLAIMS AS AMENDED						
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Additional Fee
Total Claims for Fee Purposes	22	minus	20	2	x \$18 =	\$36
Independent Claims	2	minus	2	0	x \$84 =	\$0
Multiple Dependent Claims first presented with this amendment, if applicable					+ \$280	\$0
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT:						\$36

In the event of non-payment or improper payment of a required fee, the Commissioner is authorized to charge or to credit **Deposit Account No. 12-2325** as required to correct the error.

Respectfully,

*John F. McCabe*

John F. McCabe, Attorney  
Reg. No. 42854  
908-582-6866.

Date: April 4, 2003  
Docket Administrator (Room 3J-219)  
Lucent Technologies Inc.  
101 Crawford Corner Road  
Hightstown, NJ 07733-3030

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on 4/4/03  
*Catherine F. Ryan* (Date of Deposit)  
Date



IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

# 8/14  
T. BELL  
4.17.03

Patent Application

5 **Inventors:** Girsh Blumberg  
Peter B. Littlewood

**Case No.:** 1-2

**Serial No.:** 10/043,372

**Group Art Unit:** 2831

**Filing Date:** Jan. 9, 2002

**Examiner:** Nguyen T. Ha

**Title:** ELECTRONIC DEVICES BASED ON DENSITY WAVE DIELECTRICS

10 **ASSISTANT COMMISSIONER OF PATENTS**  
**WASHINGTON, D.C. 20231**

**Sir:**

**REPLY AND AMENDMENT UNDER 37 C.F.R. §§ 1.111, 1.112, 1.121**

15 This reply requests reconsideration from an Office Action mailed Jan. 16, 2003.

**AMENDMENT**

**IN THE SPECIFICATION**

**Rewrite the paragraph between, page 7, line 27, and page 8, line 3, as:**

20 Figure 9 shows a transceiver 80 for detecting a microwave or millimeter wave  
transmission 81. The transceiver 80 includes a capacitor 82, e.g., capacitor 70 of Figure  
8, and an amplifier 84 connected to measure voltages across the capacitor electrodes 86,  
88. The capacitor 82 functions as a receiving antenna that is sensitive to transmissions  
whose wavelengths are much larger than the distance,  $d$ , between the electrodes 86, 88.  
The high sensitivity results from a giant  $\epsilon_1$  for the capacitor's dielectric 90 at operating  
25 temperatures. The giant  $\epsilon_1$  produces a large voltage response when  $d$  is  $(\epsilon_1)^{1/2}$  times  
smaller than half of the wavelength of the received signal.

**IN THE CLAIMS**

**Add new claim 21:**

30 21. The apparatus of claim 1, wherein the quasi 1D dielectric material  
comprises a cuprate.

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